REMARKS

The Office Action dated February 10, 2006, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-12 are currently pending in the application, of which claims 1, 9, and 11 are independent. Claims 1-4 and 8-11 have been amended to more particularly point out and distinctly claim the invention. No new matter has been added. Claims 1-12 are respectfully submitted for consideration.

Claim 4 was rejected under 35 U.S.C. 112, 4th paragraph because claim 4 allegedly did not further limit claims 1 or 3. Applicants respectfully submit that claim 1 has been amended, and in view of the amendment to claim 1, the rejection of claim 4 is moot. In particular, claim 1 has been amending to indicate that the "converting" is conditional, and then claim 4 specifies particular conditions. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claims 1-4 and 9-12 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0083198 of Kim et al. ("Kim"). Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested in Kim.

Claim 1, upon which claims 2-8 and 12 depend, is directed to a method for enhancing database performance in a Domain Name System (DNS). The method includes receiving data to be supplied to database operations, the data including at least

one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format. The method also includes conditionally converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label. The method further includes supplying the data to the database operations, the supplied data including at least one Internet domain name in the second format.

Claim 9, upon which claim 10 depends, is directed to a system for enhancing database performance in a Domain Name System. The system includes first means for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format. The system also includes second means for converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label. The system further includes third means for supplying the data to database operations, the supplied data including at least one Internet domain name in the second format.

Claim 11 is directed to a name server for a Domain Name System. The name server includes a first interface for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format.

The name server also includes a modification module operably connected to the first interface for converting at least one of said at least one Internet domain name into a second format in which at least two successive labels of the at least one of said at least one Internet domain name form a single label. The name server additionally includes a second interface, operably connected to the modification module for supplying the data to database operations, the supplied data including at least one Internet domain name in the second format.

Applicants respectfully submit that Kim does not disclose or suggest all of the elements of any of the presently pending claims.

Kim generally relates to a method of automatically generating an IPv6 address using an E.164 telephone number and of looking up an IP address assigned to an E.164 telephone number. As Kim explains at paragraph 0008, Kim aims to provide a method of automatically generating an IPv6 address using the telephone number of the E.164 format allocated to the telephone terminal in an IPv6-based next-generation Internet communication environment.

Claims 1, 9, and 11 recite "the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format." Applicants respectfully submit that Kim fails to disclose or suggest at least this feature of the claimed invention.

The Office Action pointed to paragraph 0034 of Kim as disclosing this feature. Paragraph 0034, however, discloses that an identifier for displaying a name address is

represented as "#". Thus, a name address for a telephone number can be expressed as, for example, "#82-2-123-4567". In other words, the pound sign followed by the complete telephone number including the area code is referred to as the "name address." However, this is not an "Internet domain name comprising a plurality of successive labels separated by dots."

Accordingly, Kim does not and cannot disclose or suggest at least the following elements: "receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format" (claim 1), "first means for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format" (claim 9), and "a first interface for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format" (claim 11).

Accordingly, it is respectfully submitted that Kim does not disclose or suggest all of the elements of claims 1, 9, and 11. Claims 2-8 and 12 depend from claim 1, and claim 10 depends from claim 9. Claims 2-4, 10, and 12 recite additional limitations as well as those incorporated by reference to claims 1 and 9 respectively. Thus, it is respectfully submitted that each of claims 2-4, 10, and 12 recites subject matter that is

neither disclosed nor suggested in Kim. Therefore, it is respectfully requested that the rejection of claims 1-4 and 9-12 be withdrawn.

Claims 5-7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kim. The Office Action took the position that Kim taught all of the features of the claims, except "wherein the predetermined number of labels is three." Applicants respectfully submit that the claims recite subject matter that is neither disclosed nor suggested in Kim.

Kim and its deficiencies with respect to claim 1, upon which claims 5-7 depend, are discussed above. Applicants respectfully submit that the Office Action's arguments with respect to size changes are not applicable to the above explained deficiencies of Kim with respect to "receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format" as recited by claim 1.

Additionally, Applicants respectfully traverse the Office Action's argument that "wherein the predetermined number of labels is three" is a limitation that is only a size. The Office Action cites in support of this argument, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); and *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), and MPEP 2144.04 (IV) (A). Applicants respectfully submit that these citations do not support the Office Action's argument. In each of those cases, a physical dimension or proportion of dimensions was at issue. In *Rose*, for example, the issue was whether the size of the package was patentable.

Likewise, in *Rinehart*, the issue was whether scaling up a prior art process was patentable. Similarly, in *Gardner*, the issue was whether changes in relative dimensions were patentable. MPEP 2144.04 (IV)(A) cites the same cases and explains these same issues in greater detail, but does not add any additional authority. In contrast the limitation at issue in the present application is "wherein the predetermined number of labels is three." This limitation provides a value of a parameter, not a physical dimension or proportion of dimensions. Accordingly, it is respectfully submitted that the Office Action's argument is inapplicable to this limitation.

Accordingly, both because the Office Action's argument is inapplicable to the limitation previously identified, and because the Office Action's argument is inapplicable to the limitation it sought to address, it is respectfully requested that the rejection of claims 5-7 be withdrawn.

Claim 8 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of U.S. Patent Application Publication No. 2003/0007482 of Khello et al. ("Khello"). The Office Action took the position that Kim discloses all of the elements of the claim except, "receiving data including another domain name in the second format" and "converting the another domain name received in the second format back to the format." Applicants respectfully submit that the claim recites subject matter that is neither disclosed nor suggested in the combination of Kim and Khello.

Kim and its deficiencies with respect to claim 1, upon which claim 8 depends, are discussed above. Applicants respectfully submit that Khello does not remedy the

deficiencies of Kim, and therefore that the combination of Kim and Khello does not disclose or suggest at least "receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format" as recited by claim 1.

Khello generally relates to a method and apparatus for resolving an entity identifier into an internet address using a domain name system (DNS) server and an entity identifier portability database. As explained at paragraph 0055, Khello suggests that a user A may enter an E.164 telephone number for user B into his user equipment. The user equipment may then generate a query. After various processing in the network, a DNS server may access its mobile number portability database which includes B's telephone number, and forward a corresponding IP address along with B's telephone number back to A's user equipment. As Khello explains at the end of paragraph 0055, this whole process may be performed so that a game may be played between users A and B.

Khello, however, is silent as to "receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels separated by dots, said at least one Internet domain name being in a first format" as recited by claim 1. Accordingly, it is respectfully submitted that Khello does not remedy the deficiencies of Kim, and thus that the combination of Khello and Kim does not disclose or suggest all of the limitations of claim 8.

Additionally, there is no motivation to combine Kim and Khello to obtain the claimed invention. In Kim, the general idea is that a telephone number corresponds directly to an IP address. Therefore, Kim generally discloses a method of automatically generating IPv6 addresses using E.164 telephone numbers and of looking up an address assigned to an E.164 telephone number. The generation method, shown in FIG. 4 of Kim, involves converting each digit of an E.164 number to a 4-bit binary format and padding the resulting sequence to form a bit sequence comprising 64 bits. The look-up method, shown in FIGs. 6a to 7 of Kim, corresponds to a conventional DNS database system, except that the method is based on the E.164 number instead of the domain name of the conventional system.

Khello, in contrast, discloses a mechanism for resolving an entity identifier, such as a telephone number, into an Internet address. The aim of Khello is to accommodate portability of entity identifiers without having to substantially modify or rework the DNS infrastructure or various established number portability schemes.

In each of the references the problem and solution disclosed are different from each other, and from that presented in the present application. The present application indicates that an objective is to improve the performance of the present de-facto name servers. This can be accomplished by conditionally combining at least two successive labels of an Internet domain name or Fully Qualified Domain Name (FQDN) to be supplied to database operations. In other words, Applicants have identified that the nature of the conversion of E.164 numbers into the FQDNs, or the nature of any other

similar conversions producing like FQDNs with plenty of short labels, can degrade the performance of the de-facto name servers, as explained at paragraph 0024 of the present specification. The cited references are completely silent about such a problem, let alone any solution to such a problem. Therefore, the idea of using modified or converted FQDNs to improve the performance of the name servers is not known from the references, nor are the problems identified by Applicants. Accordingly, there would be no motivation to combine references or otherwise modify the references to address the problems identified by the Applicants, because there was no disclosure of the problems to so motivate a combination.

Thus, the rejection should also be withdrawn in view of a lack of motivation to combine the references. For all of the above reasons, it is respectfully requested that the rejection of claim 8 be withdrawn.

For the reasons explained above, it is respectfully submitted that each of claims 1-12 recites subject matter that is neither disclosed nor suggested in the cited references. Accordingly, it is respectfully requested that all of claims 1-12 be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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